System	Series	Formation	Approximate Thickness (feet)	Physical character	Hydrologic comments
Quaternary and Tertiary	Recent to Pliocene, undifferentiated.		0-120	Chiefly gray to dark-green silty clay and some fine to coarse-grained sand and gravel.	Unconsolidated sand and gravel yield water of good quality in the coastal area and westward as far as Long, Wayne, and Brantley Counties. Pleistocene deposits in river valleys usually not water bearing.
Tertiary	Miocene	Hawthorn formation and Tampa limestone.	50-320	Pale- to dark-green phosphatic sandy clay, phosphatic sand, and phosphatic sandy limestone.	Yields up to 200 gpm + from sands of Hawthorn in McIntosh, Glynn, and Camden Counties in coastal area. These sands are little used and represent an important potential source of water where present. Tampa limestone, a part of the principal artesian aquifer, yields up to 200 gpm.
	Oligocene, undifferentiated.	Includes Suwannee limestone.	10-85	Limestone, ranging from soft, chalky, and fossiliferous to dense, calcitized, saccharoidal, and unfossiliferous.	Suwannee limestone yields up to 500 gpm in the area of the principal artesian aquifer.
	Eocene	Jackson group (Includes, among other Units, Ocala limestone and Barnwell formation)	78-400	White to cream much calcitized, recrystallized saccharoidal limestone; sandy, sparsely glauconitic limestone at bottom of section.	Ocala limestone in combination with Tampa and Suwannee limestone will yield 500 to 4,000 gpm. In Albany area yields up to 1,000 gpm. This aquifer is one of the most productive known. Transmissibility ranges from 250,000 gpd per foot in Savannah area to 1,000,000 at Brunswick, Jesup, and St. Marys.
		Claiborne group (Gosport sand, McBean, Lisbon, and Tallahatta formations.)	500-800	Dense light-gray sandy, sparsely glauconitic limestone; some bluish clay, dark-brown sandy, cherty, dolomitic limestone, and light-gray glauconitic marl.	Sands yield up to 300 gpm in area of limestone-sand aquifer. Limestones along coast and south tier of counties contain connate water of inferior quality.
		Wilcox group (Bashi marl member of Hatchetigbee formation, Tuscahoma sand, and Nanafalia formation.)	200	Alternating micaceous lignitic clay and sand with minor amounts of gray crystalline glauconitic limestone.	Tuscahoma sand will yield up to 500 gpm in area of limestone-sand aquifer.
	Paleocene	Midway group (Clayton formation.)	200	Mostly gray crystalline glauconitic limestone and minor amounts of clay and sand.	Limestone of Clayton formation yields up to 600 gpm in area of limestone-sand aquifer. Aquifer important in the southwestern part of State for both municipal and irrigation supplies.
Cretaceous	Upper Cretaceous	Includes Providence sand, Ripley formation, Cusseta sand, Blufftown and Eutaw formations undifferentiated, and Tuscaloosa formation.	2,000	Alternating green, red, and purple micaceous clay and fine to coarse-grained sand, and minor amounts of sandy limestone.	Yields from sands of the Providence, Cusseta, and Tuscaloosa formations range from 50 to 1,200 gpm. Water may contain iron in objectionable quantities.

Adapted from Herrick and Wait (Thomson and others, 1956)

Table 10. GENERALIZED DESCRIPTION OF FORMATIONS AND THEIR HYDROLOGIC CHARACTERISTICS IN GEORGIA